

Remarks

Claims 38-45, 57-62, 64-86, 88, 89, 91-109, 111-119, 132, 133, 136, 137, 140-147, 149-151, 153-173, 177-193 are pending and considered allowable. However, pursuant to Examiner Saoud's request, applicants herewith cancel all the allowable claims in favor of a new set of claims that are numbered sequentially. No changes have been made to any of the claims. For Examiner Saoud's convenience, the attached listing shows both old and new numbers for each claim. Thus, with the entry of this amendment, claims 194-314 will be pending, active and allowable in this case.

I. Substitute Specification

The purpose of the *In re Quayle* action was to allow applicants to submit another copy of the Substitute Specification that was filed December 28, 1999. Both the substitute specification and red-lined version of this specification are attached as is a copy of the response that accompanied these documents.

II. Formal Drawings

Pursuant to the Examiner's request, applicants herewith submit formal drawings.

III. Information Disclosure Statement

Applicants herewith submit an Information Disclosure Statement under MPEP 2001.06(c) in order to fully disclose arguments made and art cited during an opposition to a European patent that is a counterpart to the present application. This opposition is no longer pending, as opponents withdrew from the proceedings earlier this year. As such, the European patent stands as granted. This same Information Disclosure Statement has been previously submitted to Examiner Saoud in USSN 08/477,982.

Conclusion

In view of applicants' compliance with Examiner Saoud's requests and Examiner Saoud's previous indication of allowability of all the claims, applicants assert that this case is in condition for allowance and respectfully request issuance of the same. However, if Examiner Saoud has any further questions related to this case, she is invited to contact the undersigned attorney.

Respectfully submitted,

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LISTING OF CLAIMS SHOWING CORRESPONDENCE OF NUMBERS

194. (*Previously 38*) A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a glycosylated or unglycosylated keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide comprises (a) amino acids 79-189 of Figure 7 and (b) a sufficient number of consecutive amino acids 32 –78 of Figure 7 to confer on said polypeptide epithelial cell specificity.

195. (*Previously 39*) The method of claim 194, wherein an amount of said polypeptide that stimulates maximal stimulation of BALB/MK keratinocyte cells, stimulates less than one-fold stimulation of NIH/3T3 fibroblasts, as expressed as fold stimulation over background.

196. (*Previously 40*) The method of claim 194, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50th maximal thymidine incorporation in NIH/3T3 fibroblasts, when maximal thymidine incorporation of NIH/3T3 cells is determined by stimulation with aFGF or bFGF.

197. (*Previously 41*) The method of claim 194, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th maximal thymidine incorporation in NIH/3T3 fibroblasts, when maximal thymidine incorporation of NIH/3T3 cells is determined by stimulation with EGF or TGF-alpha.

198. (*Previously 42*) The method of claim 194, wherein the maximal stimulation of BALB/MK keratinocytes by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

199. (*Previously 43*) The method of claim 194, wherein said polypeptide is glycosylated.

200. (*Previously 44*) The method of claim 194, wherein said polypeptide is unglycosylated.
201. (*Previously 45*) The method of claim 194, wherein said polypeptide is formulated in a pharmaceutical composition comprising a pharmaceutically acceptable carrier.
202. (*Previously 57*) A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a glycosylated or unglycosylated keratinocyte growth factor (KGF) polypeptide comprising the amino acid sequence of Figure 7, or a segment of said sequence, wherein said segment comprises a sufficient number of consecutive amino acids 32-78 of Figure 7 to confer on said polypeptide epithelial cell specificity.
203. (*Previously 58*) The method of claim 202, wherein an amount of said polypeptide that stimulates maximal stimulation of BALB/MK keratinocyte cells, stimulates less than one-fold stimulation of NIH/3T3 fibroblasts, as expressed as fold stimulation over background.
204. (*Previously 59*) The method of claim 202, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50th maximal thymidine incorporation in NIH/3T3 fibroblasts, when maximal thymidine incorporation of NIH/3T3 cells is determined by stimulation with aFGF or bFGF.
205. (*Previously 60*) The method of claim 202, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th maximal thymidine incorporation in NIH/3T3 fibroblasts, when maximal thymidine incorporation of NIH/3T3 cells is determined by stimulation with EGF or TGF-alpha.
206. (*Previously 61*) The method of claim 202, wherein the maximal stimulation of BALB/MK keratinocytes by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

207. (*Previously 62*) The method of claim 202, wherein said polypeptide is formulated in a pharmaceutical composition comprising a pharmaceutically acceptable carrier.

208. (*Previously 64*) The method of claim 202, wherein the polypeptide comprises (a) a sufficient number of amino acids 32-64 of Figure 7 that said polypeptide has epithelial cell specificity, and (b) amino acids 65-194 of Figure 7.

209. (*Previously 65*) The method of claim 208, wherein said polypeptide is formulated in a pharmaceutical composition comprising a pharmaceutically acceptable carrier.

210. (*Previously 66*) The method of claim 208, wherein said polypeptide comprises Met at the amino terminus.

211. (*Previously 67*) The method of claim 208, wherein said polypeptide is unglycosylated.

212. (*Previously 68*) The method of claim 211, wherein said unglycosylated polypeptide is formulated in a pharmaceutical composition comprising a pharmaceutically acceptable carrier.

213. (*Previously 69*) The method of claim 202, wherein the polypeptide consists of (a) a sufficient number of amino acids 32-64 that said polypeptide has epithelial cell specificity, and (b) amino acids 65-194 of Figure 7.

214. (*Previously 70*) The method of claim 213, wherein said polypeptide is formulated in a pharmaceutical composition comprising a pharmaceutically acceptable carrier.

215. (*Previously 71*) The method of claim 213, wherein said polypeptide is unglycosylated.

216. (*Previously 72*) The method of claim 214, wherein said unglycosylated polypeptide is formulated in a pharmaceutical composition comprising a pharmaceutically acceptable carrier.

217. (*Previously 73*) A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a glycosylated or unglycosylated keratinocyte growth factor (KGF) polypeptide comprising amino acids 32-194 of Figure 7.

218. (*Previously 74*) The method of claim 217, wherein said polypeptide is unglycosylated.

219. (*Previously 75*) The method of claim 218, wherein said polypeptide is formulated in a pharmaceutically composition comprising a pharmaceutically acceptable carrier.

220. (*Previously 76*) The method of claim 217, wherein said polypeptide comprises Met at the amino terminus.

221. (*Previously 77*) The method of claim 217, wherein said polypeptide comprises at the amino terminus, amino acids 1-31 of Figure 7.

222. (*Previously 78*) The method of claim 202, wherein said polypeptide consists of amino acids 32-194 of Figure 7.

223. (*Previously 79*) The method of claim 222, wherein said polypeptide is unglycosylated.

224. (*Previously 80*) The method of claim 222, wherein said polypeptide is glycosylated.

225. (*Previously 81*) The method of claim 222, wherein said polypeptide is formulated in a pharmaceutically acceptable carrier.

226. (*Previously 82*) A method of stimulating epithelial cells in wound tissue, the method comprising administering to said wound tissue an epithelial cell stimulating amount of a glycosylated or unglycosylated keratinocyte growth factor (KGF) polypeptide comprising the amino acid sequence of Figure 7 or a segment of said sequence, wherein said segment comprises a sufficient number of consecutive amino acids 32-78 of Figure 7 to confer on said polypeptide epithelial cell specificity.

227. (*Previously 83*) The method of claim 226, wherein an amount of said polypeptide that stimulates maximal stimulation of BALB/MK keratinocyte cells, stimulates less than one-fold stimulation of NIH/3T3 fibroblasts, as expressed as fold stimulation over background.

228. (*Previously 84*) The method of claim 226, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50th maximal thymidine incorporation in NIH/3T3 fibroblasts, when maximal thymidine incorporation of NIH/3T3 cells is determined by stimulation with aFGF or bFGF.

229. (*Previously 85*) The method of claim 226, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th maximal thymidine incorporation in NIH/3T3 fibroblasts, when maximal thymidine incorporation of NIH/3T3 cells is determined by stimulation with EGF or TGF-alpha.

230. (*Previously 86*) The method of claim 226, wherein the maximal stimulation BALB/MK keratinocytes by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

231. (*Previously 88*) The method of claim 226, wherein the polypeptide comprises (a) a sufficient number of amino acids 32-64 of Figure 7 that said polypeptide has epithelial cell specificity, and (b) amino acids 65-189 of Figure 7.

232. (*Previously 89*) The method of claim 231, wherein said polypeptide is formulated in a pharmaceutical composition comprising a pharmaceutically acceptable carrier.

233. (*Previously 91*) The method of claim 226, wherein said polypeptide is formulated in a pharmaceutical composition comprising a pharmaceutically acceptable carrier.

234. (*Previously 92*) The method of claim 226, wherein said polypeptide further comprises Met at the N-terminus.

235. (*Previously 93*) The method of claim 226, wherein said polypeptide is unglycosylated.

236. (*Previously 94*) The method of claim 235, wherein said unglycosylated polypeptide is formulated in a pharmaceutical composition comprising a pharmaceutically acceptable carrier.

237. (*Previously 95*) The method of claim 226, wherein the polypeptide consists of (a) a sufficient number of amino acids 32-64 of Figure 7 that said polypeptide has epithelial cell specificity, and (b) amino acids 65-194 of Figure 7.

238. (*Previously 96*) The method of claim 237, wherein said polypeptide is unglycosylated.

239. (*Previously 97*) The method of claim 238, wherein said unglycosylated polypeptide is formulated in a pharmaceutical composition comprising a pharmaceutically acceptable carrier.

240. (*Previously 98*) The method of claim 226, wherein said administering is topical administration.

241. (*Previously 99*) The method of claim 240, wherein said polypeptide is topically administered to the skin or eye.

242. (*Previously 100*) The method of claim 241, wherein said polypeptide is topically administered to the skin.

243. (*Previously 101*) The method of claim 241, wherein said polypeptide is topically administered to the cornea of the eye.

244. (*Previously 102*) The method of claim 226, wherein said polypeptide comprises amino acids 32-194 of Figure 7.

245. (*Previously 103*) The method of claim 244, wherein said polypeptide is formulated in a pharmaceutical composition comprising a pharmaceutically acceptable carrier.

246. (*Previously 104*) The method of claim 244, wherein said polypeptide further comprises Met at the N-terminus.

247. (*Previously 105*) The method of claim 244, wherein said polypeptide further comprises at the amino terminus, amino acids 1-31 of Figure 7.

248. (*Previously 106*) The method of claim 226, wherein said polypeptide consists of amino acids 32-194 of Figure 7.

249. (*Previously 107*) The method of claim 248, wherein said polypeptide is unglycosylated.

250. (*Previously 108*) The method of claim 248, wherein said polypeptide is glycosylated.

251. (*Previously 109*) The method of claim 248, wherein said polypeptide is formulated in a pharmaceutically acceptable carrier.

252. (*Previously 111*) A method of inhibiting keratinocyte growth factor (KGF) activity *in vitro*, the method comprising administering to cells a KGF activity-inhibiting amount of a composition, wherein said composition comprises (a) an antibody that binds KGF and (b) a carrier.

253. (*Previously 112*) The method of claim 252, wherein said cells are epithelial cells.

254. (*Previously 113*) The method of claim 253, wherein said epithelial cells are keratinocytes.

255. (*Previously 114*) A method of stimulating epithelial cells *in vitro* comprising contacting epithelial cells with an epithelial cell stimulating amount of a glycosylated or unglycosylated keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide comprises (a) amino acids 79-189 of Figure 7 and (b) a sufficient number of consecutive amino acids 32 –78 of Figure 7 to confer on said polypeptide epithelial cell specificity.

256. (*Previously 115*) The method of claim 255, wherein an amount of said polypeptide that stimulates maximal stimulation of BALB/MK keratinocyte cells, stimulates less than one-fold stimulation of NIH/3T3 fibroblasts, as expressed as fold stimulation over background.

257. (*Previously 116*) The method of claim 255, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50th maximal thymidine incorporation in NIH/3T3 fibroblasts, when maximal thymidine incorporation of NIH/3T3 cells is determined by stimulation with aFGF or bFGF.

258. (*Previously 117*) The method of claim 255, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th maximal thymidine incorporation in NIH/3T3 fibroblasts, when maximal thymidine incorporation of NIH/3T3 cells is determined by stimulation with EGF or TGF-alpha.

259. (*Previously 118*) The method of claim 255, wherein the maximal stimulation of BALB/MK keratinocytes by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

260. (*Previously 119*) The method of claim 255, wherein said epithelial cells are keratinocytes.

261. (*Previously 132*) The method of claim 194, wherein said polypeptide stimulates a greater difference in fold stimulation of BALB/MK keratinocyte cells relative to NIH/3T3 fibroblasts when compared to the difference in fold stimulation of BALB/MK cells relative to NIH/3T3 cells stimulated by epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), acidic fibroblast growth factor (aFGF) and basic fibroblast growth factor (bFGF), as measured by percent of maximal H³-thymidine incorporation.

262. (*Previously 133*) The method of claim 194 or claim 272, wherein five nanomolar of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells, as measured by percent of maximal H³-thymidine incorporation.

263. (*Previously 136*) The method of claim 202, wherein said polypeptide stimulates a greater difference in fold stimulation of BALB/MK keratinocyte cells relative to NIH/3T3 fibroblasts when compared to the difference in fold stimulation of BALB/MK cells relative to NIH/3T3 cells stimulated by epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), acidic fibroblast growth factor (aFGF) and basic fibroblast growth factor (bFGF), as measured by percent of maximal H³-thymidine incorporation.

264. (*Previously 137*) The method of claim 202, wherein five nanomolar of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells, as measured by percent of maximal H³-thymidine incorporation.

265. (*Previously 140*) The method of claim 255, wherein said polypeptide stimulates a greater difference in fold stimulation of BALB/MK keratinocyte cells relative to NIH/3T3 fibroblasts when compared to the difference in fold stimulation of BALB/MK cells relative to NIH/3T3 cells stimulated by epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), acidic fibroblast growth factor (aFGF) and basic fibroblast growth factor (bFGF), as measured by percent of maximal H³-thymidine incorporation.

266. (*Previously 141*) The method of claim 255 or 273, wherein five nanomolar of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells, as measured by percent of maximal H³-thymidine incorporation.

267. (*Previously 142*) A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a glycosylated or unglycosylated Keratinocyte Growth Factor (KGF) polypeptide comprising the amino acid sequence of Figure 7, or a segment of said sequence, wherein said polypeptide has mitogenic activity on BALB/MK keratinocyte cells.

268. (*Previously 143*) The method of claim 267, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

269. (*Previously 144*) The method of claim 267, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

270. (*Previously 145*) The method of claim 267, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

271. (*Previously 146*) The method of claim 267, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

272. (*Previously 147*) A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a glycosylated or unglycosylated keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide comprises (a) amino acids 65-189 of Figure 7 and (b) a sufficient number of consecutive amino acids 32 –64 of Figure 7 to confer on said polypeptide epithelial cell specificity.

273. (*Previously 149*) A method of stimulating epithelial cells *in vitro* comprising contacting epithelial cells with an epithelial cell stimulating amount of a glycosylated or unglycosylated keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide comprises (a) amino acids 65-189 of Figure 7 and (b) a sufficient number of consecutive amino acids 32 –64 of Figure 7 to confer on said polypeptide epithelial cell specificity.

274. (*Previously 150*) A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte growth factor (KGF) polypeptide prepared by expressing a DNA encoding a polypeptide comprising amino acids 32 - 194 of Figure 7.

275. (*Previously 151*) The method of claim 274, wherein said DNA encodes a Met at the amino terminus.

276. (*Previously 153*) The method of claim 274, wherein said DNA is operably linked to a recombinant KGF promoter.

277. (*Previously 154*) The method of claim 274, wherein said DNA is expressed in a bacterial cell, a fungal cell, a mammalian cell or an insect cell.

278. (*Previously 155*) A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte growth factor (KGF) polypeptide comprising amino acids 32 to 194 of Figure 7 or a segment of said polypeptide, wherein said polypeptide and said segment of said polypeptide have mitogenic activity on BALB/MK cells.

279. (*Previously 156*) The method of claim 278, wherein said polypeptide comprises Met at the amino terminus.

280. (*Previously 157*) The method of claim 278, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

281. (*Previously 158*) The method of claim 278, wherein said KGF is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

282. (*Previously 159*) The method of claim 278, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

283. (*Previously 160*) The method of claim 278, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

284. (*Previously 161*) The method of claim 278, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

285. (*Previously 162*) The method of claim 278, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

286. (*Previously 163*) A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte growth factor (KGF) polypeptide comprising amino acids 32-194 of Figure 7 or a segment of said polypeptide, wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78.

287. (*Previously 164*) The method of claim 286, wherein said polypeptide comprises Met at the amino terminus.

288. (*Previously 165*) The method of claim 286 wherein said polypeptide and said segment of said polypeptide has mitogenic activity on BALB/MK keratinocyte cells.

289. (*Previously 166*) The method of claim 286, wherein said polypeptide stimulates mitogenic activity on epithelial cells.

290. (*Previously 167*) A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte

growth factor (KGF) polypeptide comprising a keratinocyte growth factor (KGF) polypeptide comprising amino acids 32-194 of Figure 7 or a segment of said polypeptide, wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from the C terminus toward the N terminus, within the region of amino acids 194 to 189.

291. (*Previously 168*) The method of claim 290, wherein said polypeptide comprises Met at the amino terminus.

292. (*Previously 169*) The method of claim 290, wherein said polypeptide and said segment of said polypeptide have mitogenic activity on BALB/MK keratinocyte cells.

293. (*Previously 170*) The method of claim 290, wherein said polypeptide and said segment of said polypeptide stimulates mitogenic activity in epithelial cells.

294. (*Previously 171*) A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte growth factor (KGF) polypeptide comprising amino acids 32-194 of Figure 7 or a segment of said polypeptide, wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78 and is truncated from the C terminus toward the N terminus, within the region of amino acids 194 to 189.

295. (*Previously 172*) The method of claim 294, wherein said polypeptide comprises Met at the amino terminus.

296. (*Previously 173*) The method of claim 294, wherein said polypeptide and said segment of said polypeptide have mitogenic activity on BALB/MK keratinocyte cells.

297. (*Previously 174*) The method of claim 294, wherein said polypeptide and said segment of said polypeptide stimulates mitogenic activity in epithelial cells.

298. (*Previously 177*) A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide is prepared by expressing a DNA encoding a polypeptide comprising amino acids 32-194 of Figure 7 or a segment of said polypeptide, wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78.

299. (*Previously 178*) The method of claim 298, wherein the DNA is expressed in a bacterial cell, a fungal cell, a mammalian cell or an insect cell.

300. (*Previously 179*) The method of claim 298, wherein said DNA encodes Met at the amino terminus.

301. (*Previously 180*) The method of claim 298, wherein said polypeptide and said segment of said polypeptide has mitogenic activity on BALB/MK keratinocyte cells.

302. (*Previously 181*) A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte growth factor (KGF) polypeptide comprising amino acids 32 to 194 of Figure 7 or a segment of said polypeptide, wherein said polypeptide and said segment of said polypeptide stimulates mitogenic activity in epithelial cells.

303. (*Previously 182*) The method of claim 302, wherein said polypeptide comprises Met at the amino terminus.

304. (*Previously 183*) The method of claim 302, wherein said polypeptide is a segment of the polypeptide of Figure 7.

305. (*Previously 184*) The method of claim 302, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

306. (*Previously 185*) The method of claim 302, wherein said KGF is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

307. (*Previously 186*) The method of claim 302, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

308. (*Previously 187*) The method of claim 302, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

309. (*Previously 188*) The method of claim 302, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

310. (*Previously 189*) The method of claim 302, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

311. (*Previously 190*) A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte growth factor (KGF) comprising a segment of amino acids 32-194 of Figure 7, wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78, and wherein said polypeptide is unglycosylated.

312. (*Previously 191*) The method of one of claims 274-275, 276-297, 298-310, wherein said polypeptide is unglycosylated.

313. (*Previously 192*) The method of one of claims 274-275, 276-297, 298-310, wherein said polypeptide is glycosylated.

314. (*Previously 193*) The method of one of claims 194, 202, 208, 213, 217, 221, 226, 231, 237, 247, 248, 252, 255, 272 or 273 which comprises met at the amino terminus.